

in the claims have been either totally ignored or dismissed as trivial. In response to this type of rejection, applicant must protest that the test set forth in Graham v. John Deere Company, 383 U.S. 1, 148 U.S.P.Q. 459 (1966), has not been followed, and the rejections are therefore improper since it is Patent Office policy to follow the Deere test. See MPEP Section 706.

With regard to the clear disregard for the Deere test, the MPEP at Section 706.02 instructs the Examiner as follows:

After indicating that the rejection is made under 35 United States Code 103, there should be set forth (1) the difference or differences in the claim over the applied reference(s), (2) the proposed modification of the applied reference(s) necessary to arrive at the claimed subject matter and (3) an explanation why such proposed modification would be obvious. MPEP at page 700-8.

As Applicant is sure the Examiner is well aware, the foregoing quote is a restatement of the Deere test, and it has not been followed in this Office Action. For this reason alone, the rejections under Section 103 are improper. Nowhere in the Office Action has there been a consideration of the differences in each claim over the applied primary reference. Nowhere in the Office Action has there been specific proposals on how the applied references may be modified to arrive at the claimed invention. Instead, the rejections deal in generalities both with regards to the applied prior art and applicant's claimed invention. Finally, since there has been neither an attempt to identify the differences between the prior art and the claims nor how to modify the references, there is obviously no explanation of why any modifications were made.

Instead of following the Deere test, the rejections are directed to an assertion that certain general concepts upon which the claims are allegedly based are well known, and any one of the particular express limitations of the claims not

found in the reference relied upon is dismissed as merely "design choices" or "well-known modifications" of the general concept. Even assuming that the general concepts embodied in applicant's claims are well known (and they are not), the CCPA has held that expedients which are functionally equivalent to each other are not necessarily obvious in view of one another. In re Scott, 139 U.S.P.Q. 297 (CCPA, 1963); In re Flint, 141 U.S.P.Q. 299 (CCPA, 1964). Also see, MPEP Section 706.02 from which the foregoing statement has been paraphrased. Therefore, there must be a consideration of the express structural limitations in the claims and that has not been done.

Another related means of avoiding any dealing with the express limitations not found in a cited reference is to assert that these limitations merely reflect "conventional practices," and in support of this conclusion a number of cited references are listed (paragraph 23 of the Office Action). Applicant respectfully submits that this is clearly an improper approach to rejecting applicant's claims. In support of this position, the Examiner's attention is directed to Section 706.02 of the MPEP (page 700-8) wherein the Examiner is instructed as follows:

Where a reference is relied on to support a rejection, whether or not in a "minor capacity" that reference should be positively included in the statement of the rejection. See In re Hoch, 166 U.S.P.Q. 406, 57 CCPA 1292, fn. 3 (1970).

It is respectfully submitted that the off-hand dismissal of numerous claim limitations directed to many different and divergent features of the invention is clearly not within the parameters of the Deere test. If the Examiner persists in this summary approach to examining the claims, applicant insists that each feature that is considered a "design choice," "well-known modification" or a "conventional practice" be found in a cited reference. Applicant believes it has a right to insist on citation of a reference as indicated by the foregoing

passage quoted from the MPEP and as provided for in MPEP Section 706.02(a).

Because of the length of the Office Action, the following remarks are grouped in accordance with the paragraph of the rejection they address.

PARAGRAPH 17

Turning to the first paragraph requiring a response, paragraph 17, applicant has carefully reviewed the application and has found each of the listed structures in the drawings. Therefore, neither the drawings nor claims have been amended in response to the objections raised in paragraph 17. In order to link each structure listed in paragraph 17 with a drawing element and thereby establish that each claimed structure is illustrated, the following table has been composed. In the left-hand column are the claimed structures listed in paragraph 17 as having no apparent illustration, and in the right-hand column are the drawing figure numbers wherein the structure appears and the reference number assigned to it.

| <u>Claim</u> | <u>Drawing Figure And Reference Numbers</u> |
|-------------------------------|--|
| 1. bucket | Inherently part of loader 160 in Figure 19A |
| 2. means for decoupling | Figures 3 and 3a - entire drawings |
| 3. resilient tubing | Item 47 in Figures 1, 2a, 4, 5, 5a, 6, 7, 7a, 8, 8a, 9 and 15b |
| 4. stationary processor means | Item 155 in Figure 19a |
| 5. weighing device | Hoist cylinder 21 in Figures 13a, 13b and cylinder 82 in Figures 14a-d |
| 6. loader | Item 160 in Figure 19a |
| 7. stationary platform scale | Figures 15a and 15b - entire drawings |

- | | |
|------------------------|---|
| A. first planar plate | Item 91 in Figures 15a, 15b |
| B. second planar plate | Item 94 in Figures 15a, 15b |
| C. stablization means | Items 92, 93 and 96 in Figures 15a, 15b |
| D. calibration plate | Item 95 in Figures 15a, 15b |

| <u>Claim</u> | <u>Drawing Figure And Reference Numbers</u> |
|--------------------------|---|
| 8. means on-board | Figure 16 - entire drawing |
| 9. plurality of chambers | Items 17a-d in Figure 17a |
| 10. piston assembly | Items 171a-d in Figure 17b |
| 11. means remote | Item 155 in Figure 19a |
| 12. mercury switch | Item 137 in Figure 16. |

PARAGRAPHS 18 AND 19

Regarding paragraphs 18 and 19 of the Office Action, applicant is unsure of how to respond to the objections to the specification since these paragraphs merely state the conclusion of the objection -- i.e., the specification "fails to adequately teach" and the invention "is inadequately disclosed" without stating the basis for the conclusion. Without such a statement of basis, applicant has no way of addressing the objection. Applicant respectfully directs the Examiner's attention to §706.03 of the MPEP wherein it states:

Where a major technical rejection is proper (e.g., lack of proper disclosure, undue breadth, utility, etc.), such rejection should be stated with a full development of the reasons rather than by a mere conclusion coupled with some stereotype expression.

A full description of how to detect and interpret pressure spikes as claimed in claims 4, 19, 37 and 52 is set forth on pages 61-62 of the specification. If Examiner has a specific objection to the disclosure as failing to enable the invention as claimed, then it should be stated in the next Office Action

as required by MPEP Section 706.03. Once the reasons for the objections are known, applicant will then be able to respond.

PARAGRAPH 20

Numerous formal objections have been made to the application in paragraph 20 of the Office Action. Except as mentioned hereinafter, each of the claims identified in paragraph 20 of the Office Action have been amended to correct the particular §112, 2nd paragraph problems identified by the Examiner. Additional changes have been made in order to correct other possible §112 problems not specifically mentioned in paragraph 20, but alluded to by the Examiner. For example, although there was no expressed §112 rejection of claim 17, applicant has amended that claim to more clearly set forth the invention claimed therein. Since claim 1 has been cancelled and replaced by new claim 103 presented in a Preliminary Amendment not considered in the first Office Action, the §112 rejection of claim 1 is moot.

Applicant has not amended claim 90 in response to the §112 rejection in paragraph 20. It is respectfully submitted that the claim phrase

"supporting a predetermined portion of the total weight of said vehicle body such that said assembly distributes said predetermined portion of the total weight of said vehicle body in a substantially uniform manner along said interface"

is reasonably definite in the sense of §112 when read in light of the specification. (See MPEP §706.03(d)). In fact, applicant cannot think of a better way to articulate the concept intended to be claimed -- i.e., uniform distribution of support along an interface joining the body and frame. If this rejection is maintained in the next Office Action, the applicant would welcome any suggested change that may correct the alleged problem.

With respect to the question raised in paragraph 20 concerning claim 95, the claim is intended to encompass embodiments of the claimed invention wherein more than one signal is transmitted -- hence the use of the phrase "at least one output signal" in connection with both the pressure sensor assembly and the remote means.

PARAGRAPH 22

Turning to the rejections based on the cited prior art, applicant must strongly object to the apparent cavalier application of these references in that express limitations to the claims appear to have been totally ignored or similarly dismissed as immaterial in formulating the §§102 and 103 rejections. In paragraph 22 for example, claims 1, 24, 26, 30, 34, 63, 64, 69, 87, and 88 have been rejected as being fully anticipated by U.S. Patent No. 3,980,871 to Lindstrom et al. Yet, even a cursory examination of these claims indicates that every element of the claims is not found in the Lindstrom et al. patent and, therefore, the reference cannot possibly be characterized as anticipating the aforementioned claims.

In support of the foregoing statements, the Lindstrom et al. patent must first be reviewed. The Lindstrom et al. patent discloses a circuit responsive to a transducer 1 for measuring a total load in a register 25 and a partial load in a register 17. Either the total or partial weight may be displayed by a display 39. As a primary feature of Lindstrom et al., a load may be measured by incremental additions to the weight of the whole load. Before additional weight is added to the load 60, the tare weight of the load may be made the present weight of the load by zeroing the output of comparator 3 as suggested by the circuitry of FIG. 2. When weight is added after the tare weight has been adjusted, the partial sum register 17 stores a value corresponding to only the added weight. The partial sum register is filled with the value for the added weight by activation of a start

circuit 12. The start circuit may be activated either manually or automatically as suggested by the optical scanning device 62. In order to update the total sum register and reset the partial sum register after the added weight has been measured, a manual setting circuit 31 is activated. The device is now ready for weighing another partial load. The whole device can be zeroed by simply activating the manual resetting circuit 41.

In further support of the conclusion that the claims listed in paragraph 22 are not fully anticipated by the Lindstrom et al. patent, applicant directs the Examiner's attention to rejected claims 26, 63 and 64 which require structure for determining the distribution of the load over the front and rear axles. As evidenced by the foregoing summary of the Lindstrom et al. patent, there is clearly no such structure in the patent.

Furthermore, rejected claims 30 and 69 require structure for determining the fore-and-aft and side-to-side weight distribution of a load on a truck. There is not even a mention of such a structure in Lindstrom et al.

Rejected claim 34 requires structure responsive to the lowering of a truck body for comparing the weight of the body to the tare weight. There is no such structure in the Lindstrom et al. patent.

Rejected claims 87 and 88 require structure for inhibiting horizontal shifting of the body on the frame while permitting free verticle movement of the body over at least a limited range. There is no such structure in Lindstrom et al.

Clearly a §102(b) rejection based on the Lindstrom et al. patent is inappropriate and should be withdrawn.

PARAGRAPH 23

Many claims have been rejected as obvious over Lindstrom et al. in paragraph 23 of the Office Action. For

those structures not expressly found in the Lindstrom et al. patent, the rejection dismisses them as "obvious and well-known modifications" or "merely design choices." In support of these conclusions, the rejection lists several general concepts as being well known. This argument is not well founded and assumes as a premise that once a general concept is known, all improvements are "merely design choices" and, therefore, if an invention is merely an improvement on an existing device embodying a general principle, then it cannot be patentable. Since virtually everything may be cast as improvements over existing devices, very few if any inventions would rise to this new test of patentability. As the Examiner well knows, the foregoing test is not the proper approach. The proper approach is the criteria set forth in Graham v. John Deere Company, supra.

According to the reasoning set forth in the Office Action, providing in combination 1) a load or dump indication, 2) a distance measurement for storage of a distance traveled between load and dump sites and 3) storage of the weight of the load hauled (claim 20) is merely a "design choice" or "well-known modification." The Lindstrom et al. reference does not deal in any manner with a combination of features such as those recited in claim 20. Applicant respectfully requests that the Examiner either identify what part of the Lindstrom et al. reference is relied upon for a conclusion that claim 20 is obvious or cite a reference in support of his position that the foregoing combination recited in claim 20 is merely a "designed choice" or "well-known modification." See MPEP §706.02(a).

Claim 20 is only an example of the types of limitations found in each of the claims listed in paragraph 23 that simply cannot be found in the Lindstrom et al. reference or in any manner arguably suggested by the reference. For example, there is no hint or suggestion in Lindstrom et al. of determining the remaining load capacity of a vehicle as claimed in claim 35.

If the rejections in paragraph 23 are maintained, applicant respectfully requests that the rejection of each claim be supported by an analysis using the criteria set forth in the Deere test. In this manner, the applicant can then have some appreciation for the Examiner's reasoning concerning a conclusion that particular claim limitations are obvious when they appear to be clearly not present in or suggested by the Lindstrom et al. patent.

PARAGRAPH 24

Claims 11-18, 23, 25, 44-51, 60-62, 75-86, 95-98 and 102 have been rejected under 35 U.S.C. §103 as obvious over Lindstrom et al. in view of a March 1985 article appearing in Coal Age magazine. To the extent the Coal Age article reflects a system actually built and tested in 1979, applicant will address the article as prior art. But, applicant reserves the right to antedate the article itself either by way of a Rule 131 affidavit or by way of establishing priority under 35 U.S.C. §120.

As indicated in applicant's Information Disclosure Statement in which the Coal Age article was brought to the Examiner's attention, the article discloses a computer dispatching system for a fleet of vehicles that requires a vehicle operator to manually enter information into an on-board computer when the vehicle arrives at a location, begins to load or dump a load. Even though weighing devices are generally well known, there is no suggestion of providing the vehicles with a load-weighing device for automatically providing the on-board computer of an indication when load or dump operations start.

It is respectfully submitted that the Coal Age article is evidence of exactly the opposite of what it has been cited for in paragraph 24. Instead of establishing obviousness, the reference clearly shows "failure by others." Although the article discusses a system that operated for five years, its

designers never appreciated the full automation that could be realized if a weighing device was added.

Regardless of how the teachings of the Coal Age article are interpreted, the fact is that the article does not disclose or suggest any apparatus or reason for transmitting weight data from each truck to a central computer. None of the claims rejected in paragraph 24 are obvious in view of Lindstrom et al. and the Coal Age article since the references do not fairly suggest downloading of weight data. Furthermore, many of the claims identified in paragraph 24 of the Office Action require certain processing of the weight data at the central computer. Where can there be a suggestion of particular kinds of data processing by a central computer when the references do not even suggest either the collection or downloading of the data itself?

In paragraph 24, the Coal Age article is described as disclosing a computer whose functions are "mere design choice" and therefore the equivalent of applicant's central control computer. Applicant must strongly protest such an obviously unsupportable statement. Restated, the position taken in the rejection is that once a computer is known in an environment where it receives data from a fleet of vehicles, then any function that is responsive to the data is obvious. Such a conclusion has no basis in any of the cited references, and if this conclusion is maintained, applicant requests that it be supported by a cited reference.

PARAGRAPH 25

Claims 66-68 and 70-72 have been cancelled. Rejected claim 28 depends from claim 26 and for the reasons set forth in paragraphs 22-24, applicant believes claim 26 is patentably distinct from the cited and applied references. Therefore, claim 28 is also patentably distinct from these cited and applied references since the addition of the Nakane et al. reference does nothing to overcome the insufficiencies of the

Lindstrom et al. patent and Coal Age article as they relate to claim 26.

PARAGRAPH 26

Claim 99 has been rejected as obvious over U.S. Patent No. 4,178,015 to Merriman et al. In order to relieve strain, applicant's claimed clamp includes a collar that is proximate to opposing end plates that are bolted together to seal the tubing 47 closed. There is no disclosure or suggestion of such a collar in Merriman et al. The rejection ignores the express limitations of claim 99 and, in a manner consistent with the approach used in other rejections, concludes that particular claimed structures are merely slight modifications unworthy of patent protection. It is respectfully submitted that the Examiner's subjective opinion of the patentability of the claimed invention is not the proper test. Applicant must insist that a reference be found that shows a collar as claimed or at least the next Office Action should explain why such a collar is obvious in view of the teachings of Merriman et al.

PARAGRAPH 27

Claims 73 and 74 have been rejected as obvious over the Lindstrom et al. patent. Claims 73 and 74 contain a number of express limitations that are simply not found in or suggested by Lindstrom et al. Where are "first and second planar plates" in Lindstrom et al.? Where is a "plurality of flexible tubing" suggested by Lindstrom et al.? Where is a "calibration plate" disclosed or suggested by Lindstrom et al.? This rejection is clearly unsupportable by Lindstrom et al. alone. If this rejection is maintained, applicant insists secondary references be cited for the foregoing structure that is expressly claimed and clearly missing from Lindstrom et al.

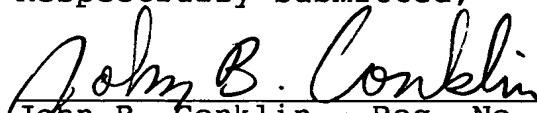
CONCLUSIONS

None of the rejections in paragraphs 22-27 are proper since they fail to analyze the claims in accordance with the test in Deere and since they ignore express limitations in the claims or dismiss them as "mere design choices" or "well-known modifications." Applicant believes the latter characterization of many of the limitations in the claims reflects the Examiner's personal prejudices rather than a conclusion reached by an objective analysis pursuant to the Deere test. Each express limitation in applicant's claims is believed to be material and any rejection of a claim should specifically deal with each limitation and the combination of the limitations in a single claim (that is, the invention should be considered as a whole). If the Examiner cannot do this from the available prior art, then the rejection is improper, and it should be withdrawn.

Submitted herewith is a Supplemental Information Disclosure Statement identifying patents cited in a related EPC application.

Signed at Chicago, in the County of Cook and State of Illinois this 20th day of May, 1987.

Respectfully submitted,


John B. Conklin - Reg. No. 30,369
Leydig, Voit & Mayer
One IBM Plaza - Suite 4600
Chicago, IL 60611
(312) 822-9666

CERTIFICATE OF MAILING

I hereby certify that this Amendment Under Rule 111 is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner of Patents and Trademarks, Washington, D.C. 20231 on this 20th day of May, 1987.

Dated: May 20, 1987 By John B. Conklin